



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT8D-17AR BYPASS RATIO: 1.0
 UNIQUE ID NUMBER: 1PW015 PRESSURE RATIO (π_{00}): 17.3
 COMBUSTOR:
 ENGINE TYPE: MTF RATED THRUST (F_{00}) (kN): 77.4

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	6.1	40.2	71.0	21.6
AS % OF ORIGINAL LIMIT	31.0	34.1	95.3	84.9
AS % OF CAEP/2 LIMIT (NO _x)			119.1	
AS % OF CAEP/4 LIMIT (NO _x)			144.6	
AS % OF CAEP/6 LIMIT (NO _x)			159.6	
AS % OF CAEP/8 LIMIT (NO _x)			193.2	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	1.365	0.21	0.93	24.50	19.6
CLIMB OUT	85	2.2	1.047	0.27	1.08	16.00	
APPROACH	30	4.0	0.357	0.55	2.68	8.00	
IDLE	7	26.0	0.148	1.33	10.70	3.20	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			512	403	2898	5039	-
NUMBER OF ENGINES				3	3	2	3
NUMBER OF TESTS				8	8	5	5
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				5.2	37.2	64.6	19.6
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	
TEMPERATURE (K)	266-297
ABS HUMIDITY (kg/kg)	

FUEL

SPEC	Jet A
H/C	
AROM (%)	

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: P&WA
 TEST LOCATION: East Hartford, CT
 TEST DATES: 07/12/1979-19/06/1980

REMARKS

1. Reduced Emissions Combustor incorporated 1/1/84

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)